

Work Order ID 141286

141286

Page 1

Item ID: D2620

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube, 206 Skidtube

Start Date: 2/3/2016 Start Qty: 12.00

12

15 80

Cust Item ID:

Required Date: 2/17/2016 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals:

Process Plan: *SA*

Date: *20160203*

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2620	Rev B

100 Skidtubes 0.00

100

Skidtubes

Memo

0.02

Skidtubes

1-Bend extrusion as per Dwg D2620 using CNC Bending Machine program 206.A and Folio F008

2- Cut Fwd end of tube as per Dwg D2620

110 QC5- Inspect part completeness to step on W/O 0.00

110

QC

Memo

0.00

Quality Control

16-2-23
15

15 16-02-24

DAS
18
0-00

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
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Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition																					
								Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

Work Order ID 141286***141286***

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Item ID: D2620

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube, 206 Skidtube

Start Date: 2/3/2016 Start Qty: 12.00

12

Cust Item ID:

Required Date: 2/17/2016 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

Identify as per dwg & Stock Location: _____

0.00

120

Packaging

Memo

LOCATION: LG002

0.00

Packaging

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.02

Quality Control

SA 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

Picklist Print

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Page 1

Work Order ID: 141286

141286

Parent Item: D2620

D2620

Parent Item Name: Skidtube, 206 Skidtube

Start Date: 2/3/2016

Required Date: 2/17/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP D02.07.26Change Dwg to rev.B; Updated LocationRF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2600-1-160

Manufactured

No

100

Each

97.0000

1

12

D2600-1-160

Extrusion Round 3" 206

**

DP 16-2-23

Location

Loc Qty

Loc Code

HALL

5

115684

5

LG

92

136919

92

4
9

D2600-1-190

76912

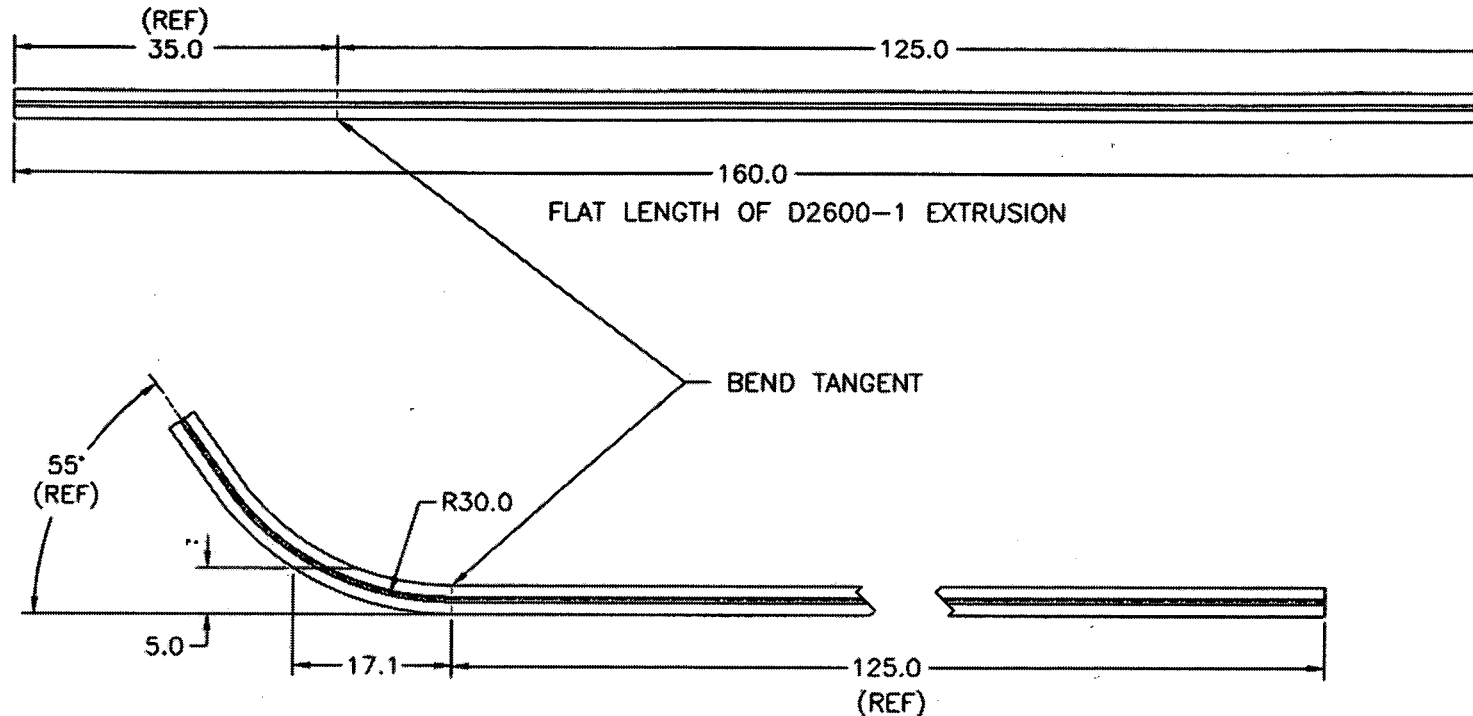
①

108169

①

SPECIFICATION CONTROL DRAWING

206 SKIDTUBE BENDING



DAMAGE TOLERANCE

1. THERE SHOULD BE NO VISIBLE WRINKLES BELOW 5.0 AFTER BENDING.
2. GOUGES UP TO 0.020 DEEP ARE ACCEPTABLE IN BENT PORTION OF THE TUBE. NO GOUGES ARE ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. DEEPER GOUGES ARE ACCEPTABLE IN THE PORTION OF THE TUBE ABOVE 5.0.
3. TUBE WIDTH SHOULD BE 3.20 ± 0.200 IN THE BEND. TUBE WIDTH SHOULD BE 3.200 ± 0.010 IN THE FLAT PORTION OF THE TUBE.
4. TUBE HEIGHT SHOULD BE 3.15 ± 0.200 IN THE BEND. TUBE HEIGHT SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE.

NOTE: ALL DIMENSIONS ARE IN INCHES

DESIGN	DRAWN BY	DART AEROSPACE USA, INC.
CHECKED	APPROVED	FAIRCHILD INTERNATIONAL AIRPORT, WA
DATE	TITLE	REV. B
99.09.10	206 SKIDTUBE BENDING CONTROL	SHEET 1 OF 1
A	97.11.07	NEW ISSUE
B	97.09.10	UPDATE FOR IN-HOUSE BENDING

RELEASED
44.04.15 DS

20160203

SA 141286